



FRESNO FIRE DEPARTMENT

UNIFORM STANDARDS FOR FIRE PROTECTION PLANNING

Revised
07/04

PREFACE

The Fresno Fire Department FIRE PROTECTION STANDARDS are enforced under Section 9-7101.4 of the FRESNO MUNICIPAL CODE.

Requirements not found in these STANDARDS may be found in the UNIFORM FIRE CODE.

These are minimum fire protection standards only, and are not to be construed as complying with the regulations of other City departments.

Compiled by
Fresno Fire Department
Fresno, California

I. ACCESS

A. INTRODUCTION TO ACCESS

The purpose of fire protection access is to allow emergency vehicles to approach a building as close as practical in order to employ the hose, ladders, and other equipment necessary for fire control and rescue operations.

Fire Department emergency vehicles are likely to be the longest, widest, tallest, and heaviest that will be driven on the residential streets, private driveways, and alleys in the city. As an example, an aerial ladder truck is 46 feet long, 10 feet wide, 13 feet in height, with a gross weight of 37 tons and a turning radius of 44 feet. The ability to manipulate and deploy Fire Department emergency apparatus is greatly affected by the adequacy and reliability of the access designed into the residential developments within the city of Fresno.

Access, as defined in these standards, would refer to private streets and driveways otherwise not defined under City of Fresno Public Works Standards for Streets.

Any development over 450 feet in depth or width shall have two (2) means of egress and ingress, so that if one is blocked, an alternate route is available.

Any unusual design may be required to have a second means of access.

“All surface access roads shall be installed and made serviceable prior to and during the time of construction.”¹

B. TYPES OF ACCESS

1. COMMON VEHICULAR ACCESS

Common access describes the private streets, drives, and alleys that connect with a public street and are required for emergency access as well as for access by the public.

2. EMERGENCY ACCESS

Where adequate and reliable vehicular access to buildings is not provided by adequate public streets or private drives, emergency access shall be provided for the exclusive use of Fire Department vehicles.

¹UNIFORM FIRE CODE, Article 9, Section 901.3

3. WALKING ACCESS

Walking access describes unobstructed walkways required to provide continuous access connecting vehicular access to portions of buildings.

4. VERTICAL ACCESS

Fire lane located adjacent to multi-story buildings, positioned so that Fire Department aerial ladders can be raised to the roof.

C. STANDARD FOR ACCESS

1. COMMON

a. Single- and Two-Family Residence

The public streets and private driveways serving single- and two-family dwelling developments are usually adequate for Fire Department access use.

b. Apartment Complexes, Condominiums, Planned Unit Development, Commercial/Industrial Developments

Any portion of the perimeter of a building shall be accessible from within 150 feet of a public street, private driveway, or other forms of approved access.

c. Private Driveways

Driveways shall be maintained a minimum clear width of 20 feet with 'FIRE LANE' signs posted at 50 foot intervals (see Pages 9-11).

Where parallel parking is allowed on one side, an additional 8 feet in the minimum driveway width shall be required, giving a total of 28 feet in width.

Where parallel parking is allowed on both sides, an additional 16 feet in the minimum driveway width is required, giving a total of 36 feet.

In addition to general requirements and policies, the Fire Department may require an increase or decrease in the driveway width depending on particular situations.

d. Turnarounds

Turnarounds shall be required at the end of single-entry private road designs of over 150 in length.

Intermediate turnarounds shall be required for single-entry road-driveway designs exceeding 350 feet in length and for dual-entry designs exceeding 700 feet in length. Maximum length of single-entry road/driveway designs shall be 450 feet.

Cul-de-sac turnarounds, intermediate, and "T" turnarounds shall have a minimum 34-foot centerline turning radius with 20 feet clear driving width. "T" or "Hammerhead" turnarounds shall have a minimum width of 20 feet and 60 feet of length (44 foot centerline turning radius where truck access is required). All turnarounds must be kept clear of all obstructions (e.g., no parking, no garbage bins, etc.) (see Exhibit 1).

e. Vertical Access

Where buildings or portions of buildings are more than 35 feet in height, measured from natural grade, driveways shall be located adjacent to at least one side of such building. Access shall be provided adjacent to at least two sides of such buildings that exceed 150 feet in width with "FIRE LANE" signs posted at 50 foot intervals. Driveways shall be in alignment to accommodate the use of Fire Department aerial apparatus. Vertical access driveways shall be spaced out from the building at distance of 1/5 the building's height.

All required common vehicular access shall maintain a minimum 13 feet 6 inches of vertical clearance over the entire width of the access.

f. Angle of Grade

Access surfaces shall not exceed a 20% grade or contain any irregularity creating an angle of approach or departure in excess of 20% (11.3°).

2. EMERGENCY

Emergency ACCESS is for the exclusive use of Fire Department apparatus and is required where common access is either inadequate or unreliable.

Emergency access shall be a minimum of 20 feet in unobstructed width. Additional unobstructed widths may be required at curves, turns, and turnarounds to accommodate the 34 foot centerline turning requirements of fire apparatus (44 foot centerline turning radius where truck access is required).

Turnaround requirements for emergency access shall be the same as in 1.d. above.

Gates, posts, or other barriers approved by the Fire Department shall be installed at every entrance to emergency accesses.

A padlock may be installed on gates used solely for emergency access or in conjunction with other locking devices. Care shall be taken, however, that removal of the padlock will permit full operation of the access gate. A one-inch red band shall be painted around the body of the padlock. Padlocks shall be approved "City of Fresno Bypass Lock" (see Page 7-8).

The entrances to all emergency accesses shall be posted with permanent signs with the following wording: "FIRE LANE" in six-inch letters, "VEHICLES REMOVED AT OWNER'S EXPENSE" in two-inch letters (the sign shall show a telephone number the owner can call to recover the vehicle) (see Pages 9-11).

Assurance of the integrity and reliability of emergency accesses may require the dedication of a fire protection access easement to the City or County.

"All surface access roads shall be installed and made serviceable prior to and during the time of construction."²

3. WALKING

Walking access shall be required to connect vehicular access routes with the required pedestrian entrances and exits in the buildings. Required walking access shall be designed to prevent sharp turns or obstacles that would hinder the carrying of ground ladders and other hand-held equipment.

D. SECURED COMPLEX BYPASS SWITCH

A problem exists in many secured apartment, condominium, and residential developments in regard to access by police and fire vehicles. Due to the increase in the number of locked gates and barriers, it has become almost impossible for these emergency services to maintain separate keys or pas cards for each development. To eliminate this problem, the City of Fresno provides a method to bypass these locking systems.

The bypass consists of an electric switch cylinder that overrides the existing system. this system is operated by a key that is carried only by police and fire vehicles.

BYPASS SWITCH REQUIREMENTS (Also see Pages 7-8)

- ◆ The bypass cylinder shall be "City of Fresno Bypass Lock Electric Switch Cylinder."
- ◆ The cylinder shall be mounted in plain view at any convenient place on or near the gate or barrier. A one-inch wide red circle shall be painted around the cylinder.

²Ibid.

- ◆ During construction of a new development, a "construction" core shall be used in the cylinder for convenience of the contractor. After completion of the development, owner or agent shall notify the Fresno Police Department, Property Section (498-1235), and a permanent core shall be installed into the cylinder by a Police official.
- ◆ After permanent core is installed, only Police and Fire Personnel shall have

pass keys.

- ◆ The cylinder is to be purchased by the owner or contractor
- ◆ The cylinder may be purchased wherever the owner or contractor desires as long as it is of the model designated.
- ◆ When the cylinder is ordered, be sure to specify that it is for "City of Fresno Fire-Police access." The permanent core shall then be sent to the Police Department for installation after construction is completed.

II. FIRE HYDRANT SPACING AND FIRE FLOW REQUIREMENTS

The Fire Department requires that in residential areas, fire hydrants shall be no further than 600 feet apart, and the travel distance to a fire hydrant over a paved access shall not exceed 300 feet.

In single-family residential subdivisions, the Fire Department requires that fire hydrants be installed in accordance with Fresno City specifications on no less than a minimum six inch (6") water main capable of flowing 1500 gallons per minute as calculated by using methods in FIRE FLOW TESTS, published by the Insurance Services Office. This system may be incorporated with the domestic water supply.

The Fire Department requires that in commercial areas, fire hydrants shall be no further than 450 feet apart, and the travel distance to a fire hydrant over a paved access shall not exceed 225 feet.

EXCEPTION: When all buildings served are fully protected with an approved automatic fire extinguishing system, on-site hydrants may be spaced according to residential standards.

In commercial areas, the Fire Department requires that fire hydrants be installed in accordance with Fresno City specifications on no less than a minimum eight inch (8") water main capable of flowing 2500 gallons per minute as calculated by using methods in FIRE FLOW TESTS, published by the Insurance Services office. This system may be incorporated with the domestic water system.

Where fire hydrants are to be installed by the developer, such fire hydrants shall be tested, painted, numbered, and approved by the Fire Department. Fire hydrants shall be installed and made serviceable prior to and during the time of construction.

A reduction in the required fire flow may be allowed for fire-resistive construction and the provision of automatic fire sprinkler systems.

All required fire flows are to be available within the water system at a minimum 20 pounds per square inch residual pressure.

POLICE/FIRE BYPASS LOCKS FOR SECURED ACCESS DEVELOPMENTS

It is now common for apartment, condominium, and private residential developments to provide security measures in the form of locked access gates at each entrance to the complex property. This practice, although desirable, severely restricts the city of Fresno's Police and Fire Departments from providing emergency services to these areas. Moreover, the installation of these gates may be in violation of adopted city codes (Fresno Municipal Code, Section 9-70902.4).

Recognizing the desirability for personal safety and property security, the City of Fresno has developed a bypass system that will allow entry to secured properties by the Police and Fire Departments. This system consists of dedicated locks to which only police and fire units have operating keys. The locking devices may be obtained as cylinder locks for use with electrically operated gates or as padlocks for use in other applications.

Bypass Lock Specifications

City of Fresno police/fire padlock or electric switch cylinder.

Installation

1. The bypass lock shall be purchased by the owner or contractor. The purchaser must specify that the lock is a "City of Fresno bypass lock" so the vendor will send the permanent core to the Police Department for installation later (See Item No. 2).
2. The bypass lock, when purchased, will be fitted with a construction core. keys may also be purchased for this core, if desired, to be issued during the construction phase of a new development.

Caution: All construction cores sold in the City of Fresno are keyed alike and may be operated with a single construction key. To obtain maximum security, the construction core must be replaced with a permanent core. For identification purposes, the base of the construction core is painted red.

After completion of the construction project, the owner or his agent shall notify the Fresno Police Department, Property Section (498-1235, Monday through Friday, 7:30 a.m. to 4:30 p.m.), and a permanent core will be installed by a police officer.

3. The cylinder lock should be mounted in plain view on the control panel or immediately adjacent to the access gate. A one-inch wide red circle shall be painted around the cylinder.

4. The padlock may be installed on gates used solely for emergency access or in conjunction with other locking devices. Care shall be taken, however, that removal of the padlock will permit full operation of the access gate. A one-inch red band shall be painted around the body of the padlock.

Sources

Bypass locks may be purchased wherever the owner or contractor desires as long as they are the model designated. As an aid only, the locks are presently available through the following dealers:

CHILDS & CO., INC.
2539 E. Hammond
485-0520

VALLEY HARDWARE, INC.
1355 N. Blackstone
268-4586

SIERRA LOCK
1560 N. Palm
266-9421

HAVEN'S LOCK & SAFE
5408 N. Blackstone
439-5630

or

4854 E. Kings Canyon
255-6611

Any additional questions relating to bypass switch requirements can be directed to:

Fresno Police Department, Property Section
Sergeant Dennis Ball, 498-1235
Monday through Friday, 7:30 a.m. to 4:30 p.m.

****OR****

Fresno Fire Department, Operations Bureau, 621-4000

FRESNO FIRE DEPARTMENT

REQUIREMENTS FOR DESIGNATING FIRE LANES ON PRIVATE PROPERTY

Background: The Uniform Fire Code, Section 902.1 requires that access roads be provided for firefighting apparatus on private property. Roads on private property are generally designed to a lesser standard than public streets, making it often quite difficult for fire engines and trucks to maneuver. The only way the Fire Department can assure that firefighting and medical aid assistance can be delivered in a timely manner to a private complex is to require that fire access roads be kept clear. On private property, it is the owner's or common interest development association's legal responsibility to assure that such access is made available.

The following requirements for fire lane designations and entrance signage will allow the property owner or agent to have a vehicle towed from a fire lane without a citation being issued by the Police Department. It is the responsibility of the property owner or his agent to notify a tow company to have a vehicle removed subject to the provisions of the California Vehicle Code (CVC) Sections 22658, 22658.2, and 22953. The Police Department can issue a citation for illegal parking; however, the Police Department does not have illegally parked vehicles removed from private property unless they have been reported stolen, embezzled, abandoned, or were involved in a hit and run.

If you have a vehicle towed, you must follow the provisions of CVC, Sections 22658, 22658.2, and 22953. Especially critical is the requirement to notify the Police Department of the vehicle's remove prior to towing it. Copies of CVC Sections 22658, 22658.2, and 22953 are enclosed for reference.

Where Required: In general, private access roadways less than 28 feet in width shall be designated as fire lanes on both sides. Roads 28 to 36 feet wide may have parking on one side with the opposite curb marked as a fire lane. (Note: Where perpendicular parking is provided on one side of roads less than 36 feet in width, no parking is permitted on the opposite curb.) Roads 36 feet and wider may have parking on both sides. Additionally, no parking is permitted within 15 feet of a fire hydrant. Curbs for this distance must be designated as a fire lane. See the enclosed diagram for clarification.

Fire Lane Marking: Required fire lanes shall be designated by painting the curb red (top and side) and stenciling "Fire Lane" in 3 inch white letters every 50 feet. If no curb is present, paint a 6 inch minimum width red stripe at the edge of the roadway with "Fire Lane" in 3 inch white letters every 50 feet.

Signs may be used in conjunction with or in lieu of curb painting. The Fire Department recommends that curb painting be used as it more effectively delineates the extent of the fire lanes and is better recognized by the public. Additionally, signs are subject to vandalism and theft.

The minimum standard for curbside signs shall be:

1. The signs shall state: 'FIRE LANE NO PARKING' in minimum 3 inch letters on a contrasting background.

2. The signs shall be placed at the beginning and end of the designated fire lane and at 50 foot intervals in between. Directional arrows shall be placed on the signs to indicate the extent of the fire lanes (----->, <-----, <-----).
3. The signs shall be set 18 to 24 inches from the curb and at a height of 7 feet to the bottom of the sign when adjacent to sidewalks and may be 5 feet elsewhere.
4. Signs shall not be obstructed by landscaping or street fixtures and shall be readily visible from a vehicle.

Entrance Signs: In order to comply with the California Vehicle Code (CVC) requirements allowing towing from private property, the following sign must be posted at all public entrance drives to the property. The signs shall be a minimum of 17 inches by 22 inches in size and have lettering a minimum of 1 inch stating:

WARNING - VEHICLES STOPPED, PARKES, OR LEFT STANDING IN
FIRE LANES WILL BE IMMEDIATELY REMOVED AT OWNER'S EXPENSE

Pick one: 22658.2(b) CVC (planned unit developments and condominiums)

-OR-

22658(a) CVC (commercial property, apartments)

Fresno Police Department - 498-1414

Note: The wording of this sign may be incorporated with other parking restriction entrance signs regulated by the Police Department.

Emergency Access Only Gate Signs: Emergency access ages are across entrances that have been designed only for use by police and fire. Such access is designated on the site plan review prior to construction of a complex. A special sign is required on both sides of the gate that states:

“FIRE LANE” (in 6 inch letters)

“Vehicles Removed at Owner’s Expense (in 2 inch letters)

Fresno Police Department - 498-1414 (in 1 inch letters)

Common Access Road Gates: Common access roads are both for the use of occupants and emergency personnel. Gates across these roadways must be designated on the approved site plan for the project. The addition of gates across these roadways after completion of a project must be approved by Traffic Engineering and Fire.

Fire/Police Locks: A separate handout is available containing information on bypass keyways for automatic gates and for special padlocks on emergency access and common access roadways.

Removal From Private Property

22658. (a) Except as provided in Section 22658.2, the owner or person in lawful possession of any private property, within one hour of notifying, by telephone or, if impractical, by the most expeditious means available, the local traffic law enforcement agency, may cause the removal of a vehicle parked on the property to the nearest public garage under any of the following circumstances:

(1) There is displayed in plain view at all entrances to the property, a sign not less than 17 by 22 inches in size, with lettering not less than one inch in height, prohibiting public parking and indicating that vehicles will be removed at the owner's expense, and containing the telephone number of the local traffic law enforcement agency. The sign may also indicate that a citation may also be issued for the violation.

(2) The vehicle has been issued a notice of parking violation, and 96 hours have elapsed since the issuance of that notice.

(3) The vehicle is on private property and lacks an engine, transmission, wheels, tires, doors, windshield, or any other major part or equipment necessary to operate safely on the highways, the owner or person in lawful possession of the private property has notified the local traffic law enforcement agency, and 24 hours have elapsed since that notification.

(4) The lot or parcel upon which the vehicle is parked is improved with a single-family dwelling.

(b) The person causing removal of the vehicle, if the person knows or is able to ascertain from the registration records of the Department of Motor Vehicles the name and address of the registered and legal owner of the vehicle, shall immediately give, or cause to be given, notice in writing to the registered and legal owner of the fact of the removal, the grounds for the removal, and indicate the place to which the vehicle has been removed. If the vehicle is stored in a public garage, a copy of the notice shall be given to the proprietor of the garage. The notice provided for in this section shall include the amount of mileage on the vehicle at the time of removal. If the person does not know and is not able to ascertain the name of the owner or for any other reason is unable to give the notice to the owner as provided in this section, the person causing removal of the vehicle shall comply with the requirements of subdivision (c) of Section 22853 relating to notice in the same manner as applicable to an officer removing a vehicle from private property.

(c) This section does not limit or affect any right or remedy which the owner or person in lawful possession of private property may have by virtue of other provisions of law authorizing the removal of a vehicle parked upon private property.

(d) The owner of a vehicle removed from private property pursuant to subdivision (a) may recover for any damage to the vehicle resulting from any intentional or negligent act of any person causing the removal of, or removing, the vehicle.

(e) Any owner or person in lawful possession of any private property, or an "association" pursuant to Section 22658.2, causing the removal of a vehicle parked on that property is liable for double the storage or towing charges whenever there has been a failure to comply with paragraph (1), (2), or (3) of subdivision (a) or to state the grounds for the removal of the vehicle if requested by the legal or registered owner of the vehicle as required by subdivision (f).

(f) Any owner or person in lawful possession of any private property, or an "association" pursuant to Section 22658.2, causing the removal of a vehicle parked on that property shall state the grounds for the removal of the vehicle if requested by the legal or registered owner of that vehicle. Any towing company that removes a vehicle from private property with the authorization of the property owner or the property owner's agent shall not be held responsible in any situation relating to the validity of the removal. Any towing company that removes the vehicle under this section shall be responsible for (1) any damage to the vehicle and (2) the removal of a vehicle other than the vehicle specified by the owner or other person in lawful possession of the private property.

(g) Possession of any vehicle under this section shall be deemed to arise when a vehicle is removed from private property and is in transit.

(h) A towing company may impose a charge of not more than on-half of the regular towing charge for the towing of a vehicle at the request of the owner of private property or that owner's agent pursuant to this section if the owner of the vehicle or the owner's agent returns to the vehicle before it is removed from the private property. The regular towing charge may only be imposed after the vehicle has been removed from the property and is in transit.

(i) (1) A charge for towing or storage, or both, of a vehicle under this section is excessive if the charge is greater than that which would have been charged for towing or storage, or both, made at the request of a law enforcement agency under an agreement between the law enforcement agency and a towing company in the city or county in which is located the private property from which the vehicle was, or was attempted to be, removed.

(2) If a vehicle is released within 24 hours from the time the vehicle is brought into the storage facility, regardless of the calendar date, the storage charge shall be for only one day. Not more than one day's storage charge may be required for any vehicle released the same day that it is stored.

(3) If a request to release a vehicle is made and the appropriate fees are tendered and documentation establishing that the person requesting release is entitled to possession of the vehicle, or is the owner's insurance representative, is presented within the initial 24 hours of storage, and the storage facility fails to comply with the request to release the vehicle or is not open for business during normal business hours, then only one day's storage charge may be required to be paid until after the first business day. A business day is any day in which the lienholder is open for business to the public for at least eight hours. If a request is made more than 24 hours after the vehicle is placed in storage, charges may be imposed on a full calendar day basis for each day, or part thereof, that the vehicle is in storage.

(j) any person who charges a vehicle owner a towing, service, or storage charge at an excessive rate, as described in subdivision (i), is liable to the vehicle owner for four times the amount charged.

(k) Persons operating or in charge of any storage facility where vehicles are stored pursuant to this section shall accept a valid bank credit card or cash for payment of towing and storage by a registered owner or the owner's agent claiming the vehicle. A person operating or in charge of any storage facility who refuses to accept a valid bank credit card is liable to the registered owner of the vehicle for four times the amount of the towing and storage charges, but not to exceed five hundred dollars (\$500). In addition, persons operating or in charge of the storage facility shall have sufficient moneys on the premises of the primary storage facility during normal business hours to accommodate, and make change in, a reasonable monetary transaction.

Removal From Common Interest Development

22658.2. (a) Except as provided in subdivision (b), an "association", as defined in subdivision (a) of Section 1351 of the Civil Code, of a common interest development, as defined in subdivision (c) of Section 1351 of the Civil Code, may cause the removal of a vehicle parked on that property to the nearest public garage if all of the following requirements are satisfied:

(1) A sign not less than 17 by 22 inches in size with lettering not less than one inch in height appears at each entrance to the common interest development and contains both of the following:

(A) A statement that public parking is prohibited and all vehicles not authorized to park on the common interest development will be removed at the owner's expense.

(B) The telephone number of the local traffic law enforcement agency. The sign may also indicate that a citation may be issued for the violation.

(2) If the identity of the registered owner of the vehicle is known or readily ascertainable, the president of the association of his or her designee shall, within a reasonable time, notify the owner of the removal by first-class mail. If the identity of the owner of the vehicle is not known or ascertainable, the president of the association or his or her designee shall comply with subdivision (c) of Section 22853.

(3) The president of the association or his or her designee, gives or causes to be given, notice of the removal to the local traffic law enforcement agency immediately after the vehicle has been removed. The notice shall include a description of the vehicle, the license plate number, and the address from where the vehicle was removed.

(b) The association may cause the removal without notice of any vehicle parked in a marked fire lane, within 15 feet of a fire hydrant, in a parking space designated for handicapped without proper authority, or in a manner which interferes with any entrance to, or exit from, the common interest development or any separate interest contained therein.

(c) Notwithstanding Section 1708 of the civil Code, the association shall not be liable for any damages incurred by the vehicle owner because of the removal of a vehicle in compliance with this section or for any damage to the vehicle caused by the removal. However, the owner of a vehicle removed pursuant to this section may recover for any damage to the vehicle which results from any intentional or negligent act of the association or any person causing the removal of, or removing, the vehicle.

(d) Notwithstanding any other provision of law, subdivisions (f) to (k), inclusive, of Section 22658 apply to the removal of vehicles pursuant to this section.

Removal Prohibited

22853. (a) Every owner or person in lawful possession of any private property which is held open to the public, or a discernible portion thereof, for parking of vehicles at no fee, shall not tow or remove, or cause the towing or removal, of any **vehicle** within one hour of the **vehicle** being parked.

(b) Notwithstanding subdivision (a), a **vehicle** may be removed immediately after being illegally parked within 15 feet of a fire hydrant, in a fire lane, or in a parking space or stall legally designated for disabled persons.

(c) Subdivision (a) does not apply to property designated for parking at an apartment complex, or to property designated for parking at a hotel or motel where the parking stalls or spaces are clearly marked for a specific room.

LOCK BOXES: ACCESS AND ELEVATOR KEYS

Fire Department access problems exist in many of our high-rise and major commercial buildings. Fire companies often have difficulties gaining entrance to buildings, and once inside, find the stairwell doors are locked, elevator control keys not available, and roof access door padlocked. These problems have been successfully met by placing a lock box containing the necessary keys in a location easily accessible to the Fire Department.

Note: Fire Department lock boxes are only to be used for access into and within buildings. Access for pedestrian and vehicle gates is provided by a police/fire padlock or keyway (a separate handout is available describing this system).

LOCK BOX SPECIFICATIONS:

1. This lock box shall be located inside or outside of the building on the ground floor as specified by the Fire Department. If located on the inside, the lock box shall be placed on a wall in a position visible to responding fire companies upon their entrance. Theft resistant boxes are available for exterior installation (optional alarm tamper switch for the box is available) and this type of box should be installed for access without a ladder.
2. Keys required by the Fire Marshal to be installed in the box may include:
 - a. Keys to locked points of ingress whether on the interior or exterior of such building.
 - b. Keys to locked mechanical equipment rooms.
 - c. Keys to locked electrical panel rooms.
 - d. Keys to elevator controls and elevator equipment room.
 - e. Keys to other areas as directed by the Fire Marshal.
 - f. Written instructions on equipment shutdown as directed by the Fire Marshal.
3. The lock box is purchased and installed by the building owner or authorized representatives.
4. The Fire Department requires the boxes to be keyed alike. There are two lock box systems used in the city of Fresno.
 - a. MEDICO CYLINDER, keyed to Fresno Fire Department key with a security trim. This cylinder may be mounted to any box.
 - b. KNOX BOX, a propriety keyway and box system only available from the Knox Box company. To order the Knox system, you must pick up a signed order form from the Fire Prevention Bureau, 450 M Street.
5. With either system, the box is delivered open without a key. After the box is installed,

call the Fire Prevention Bureau (559) 498-1023, and arrange for an inspector to lock the keys in the box. All keys must have tags identifying their use. use waterproof tags for outside boxes or place keys in a sealed plastic bag.

6. In the future, if building locks are re-keyed, you must call the Fire Prevention Bureau and arrange to have the lock box keys replaced.

KNOX RAPID ENTRY SYSTEM PROCEDURE

1. In order to process an order for a Knox device and have it keyed to your secured lock code, the building owner must obtain a signed Authorization/Order Form from your fire department.
2. The Authorized Signers on file for your department are:

Randy R. Bruegman
Joel L. Aranaz
Kerri L. Donis
3. The building owner then completes the form and mails it to the Knox Company with a check or money order.
4. Master Keys will be sent to your department at no charge after the first Knox device is purchased by a building owner.
5. Key lock boxes are sent to building owners with the box shell and door wrapped separately. The doors are sent with the cam in locked position and no key is provided so that the box cannot be locked without your help.
6. The building owner installs the boxes as per the recommended installation instructions, which are provided with each shipment.
7. The building owner will then contact your department when the box is installed and request that you install the door with their keys inside. The building owner's keys are now secured in the Knox Box.
8. The Request/Change Fore can be used to obtain the following items. Fore security purposes, an authorized signature must be provided.
 - ◆ Additional master keys
 - ◆ Add or delete authorized signers
 - ◆ Installation address report
9. The Installation Report is a printout of the addresses of all Knox devices keyed for your fire department's access. It include serial numbers, addresses, and dates of purchase.
10. The following items are available at no cost and can be requested any time. The Knox Materials Request Form can e used for these items.
 - ◆ Authorization/Order Forms
 - ◆ Brochures, Product Information, and Price lists
 - ◆ Sample Ordinance and Other Information

FIRE APPARATUS WEIGHT FOR EMERGENCY ACCESS ROAD DESIGN

The largest fire apparatus in the Fresno Fire Department inventory is Truck 11. Weight specifications are as follows:

Gross Vehicle Weight	73,500 pounds
Front Axle	21,500 pounds
Rear Dual Axles	26,000 pounds each
Tire Size:	
Front	43" diameter X 13" wide
Rear (dual tires each axle)	41" diameter X 9" wide

Centerline turning radius is 44 feet.